

A large, stylized red eagle graphic is positioned behind the title text. The eagle is facing left, with its wings spread wide. It has a banner in its beak that reads "E PLURIBUS UNUM".

# Comprehensive Capital Analysis and Review 2013 Summary Instructions and Guidance

November 9, 2012

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BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM





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# Introduction

As indicated in the Board's rule regarding capital plans (the capital plan rule), the Federal Reserve's assessment of capital adequacy for U.S.-domiciled, top-tier bank holding companies (BHCs) with total consolidated assets of \$50 billion or more will include consideration of a BHC's overall financial condition, risk profile, and capital adequacy on a forward-looking basis.<sup>1</sup> Assessments will also be made on the overall content of a capital plan and the strength of the BHC's capital adequacy process, including its capital policy.<sup>2</sup> Pursuant to the capital plan rule, 19 of the largest BHCs are required to submit a capital plan approved by the BHC's board of directors, or a committee thereof, for the Federal Reserve's annual Comprehensive Capital Analysis and Review (CCAR), irrespective of whether the BHC intends to undertake any capital distributions over the planning horizon covered in its capital plan.<sup>3</sup> For CCAR 2013, capital plans should be submitted no later than **January 7, 2013**.<sup>4</sup>

As outlined in the capital plan rule, the supervisory review of a BHC's capital plan includes an assessment of

- the comprehensiveness of the capital plan, including the suitability of the BHC scenarios, and the

extent to which the risk measurement and other analysis underlying the plan capture and appropriately address potential risks stemming from all activities across the BHC under baseline and stressed operating conditions;

- the reasonableness of the BHC's assumptions and analysis underlying the capital plan and a review of the robustness of the BHC's capital adequacy process;
- the BHC's capital policy; and
- the BHC's ability to maintain capital above each minimum regulatory capital ratio and above a tier 1 common ratio of 5 percent on a pro forma basis under expected and stressful conditions throughout the planning horizon.<sup>5</sup> See [table 1](#) for a list of these regulatory minimums.

As a part of the supervisory review of the capital plans, the Federal Reserve will also assess BHCs' strategies for addressing proposed revisions to the regulatory capital framework agreed upon by the Basel Committee on Banking Supervision (BCBS), commonly known as Basel III, and requirements arising from the Dodd-Frank Wall Street Reform and Consumer Protection Act (DFA).<sup>6</sup> The Board and

<sup>1</sup> The capital plan rule is codified at 12 CFR 225.8. Asset size is measured over the previous four calendar quarters as reported on the FR Y-9C regulatory report.

<sup>2</sup> See section 225.8(e)(1)(i) of the capital plan rule. 12 CFR 225.8(e)(1)(i).

<sup>3</sup> The 19 bank holding companies participating in the 2013 CCAR are Ally Financial Inc.; American Express Company; Bank of America Corporation; The Bank of New York Mellon Corporation; BB&T Corporation; Capital One Financial Corporation; Citigroup Inc.; Fifth Third Bancorp; The Goldman Sachs Group, Inc.; JPMorgan Chase & Co.; Keycorp; MetLife, Inc.; Morgan Stanley; The PNC Financial Services Group, Inc.; Regions Financial Corporation; State Street Corporation; SunTrust Banks, Inc.; U.S. Bancorp; and Wells Fargo & Company. These 19 firms also participated in the 2012 and 2011 CCARs and the 2009 Supervisory Capital Assessment Program.

<sup>4</sup> The capital plan rule requires capital plans to be submitted by January 5; however, the Federal Reserve is granting an extension of this deadline for purposes of CCAR 2013 because January 5, 2013, falls on a Saturday. See section 225.8(d)(1)(ii) of the capital plan rule. 12 CFR 225.8(d)(1)(ii).

<sup>5</sup> See section 225.8(e)(1)(i) of the capital plan rule. 12 CFR 225.8(e)(1)(i).

<sup>6</sup> See Basel Committee on Banking Supervision (2010), "Basel III: A Global Framework for More Resilient Banks and Banking Systems," (Basel: BCBS, December), [www.bis.org/publ/](http://www.bis.org/publ/)

**Table 1. Regulatory Minimum Ratios**

Regulatory Ratio	Regulatory Minimum
Tier 1 Common Ratio	5 percent
Tier 1 Leverage Ratio	3 or 4 percent
Tier 1 Risk-Based Capital Ratio	4 percent
Total Risk-Based Capital Ratio	8 percent

\* The tier 1 leverage ratio minimum is 3 percent for a BHC with a composite supervisory rating of "1" or that is subject to the Board's market-risk rule (12 CFR part 225, appendix E); for all other BHCs, 4 percent.

the other federal banking agencies have begun the process for adopting the Basel III framework agreed to by the BCBS and issued three notices of proposed rulemaking on Basel III in June 2012. In line with these proposals, the Federal Reserve expects that a BHC will demonstrate it can achieve, readily and without difficulty, the ratios required by the Basel III framework as it would come into effect in the United States. In particular, the assessment should reflect the proposed Basel III framework, as described in the following proposed and final rules:

- Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Minimum Regulatory Capital Ratios, Capital Adequacy, Transition Provisions, and Prompt Corrective Action (Basel III NPR).<sup>7</sup>
- Regulatory Capital Rules: Advanced Approaches Risk-Based Capital Rule; Market Risk Capital Rule (Advanced Approaches NPR).<sup>8</sup>
- Risk-Based Capital Guidelines: Market Risk Rule (Market Risk Final Rule).<sup>9</sup>

A BHC's projections regarding Basel III also should include any capital surcharge for systemically important financial institutions (SIFIs) and any planned capital actions including dividends and other distributions.<sup>10</sup>

Each BHC must submit, as part of its capital plan due January 7, results of its company-run stress test using three scenarios the Federal Reserve will provide under the Board's rules implementing sections 165(i)(1) and (2) of the DFA (DFA stress testing rules)—baseline scenario (supervisory baseline scenario), adverse scenario (supervisory adverse scenario), and severely adverse scenario (supervisory severely adverse scenario). These results should reflect the capital action assumptions required under the DFA stress testing rules (DFA stress testing capital actions).<sup>11</sup> For the supervisory severely adverse scenario, which will inform the CCAR post-stress

capital analysis, each BHC must also submit, as part of its capital plan, estimated pro forma capital ratios calculated with the BHC's planned capital actions as included in a BHC baseline scenario.

In addition to three supervisory scenarios, each BHC must conduct a stress test based on its own scenarios, including at least one stress scenario (BHC stress scenario) and a baseline scenario (BHC baseline scenario), and submit the results, reflecting the BHC's planned capital actions under these scenarios, over the planning horizon. As discussed further below, under certain conditions a BHC can choose to use the supervisory baseline scenario as its own baseline scenario. (See the "[Stress Testing Scenarios](#)" section for further discussion of this topic.)

In conducting its supervisory stress tests of BHCs under the DFA stress testing rules, the Federal Reserve will use the same scenarios and assumptions as the BHCs are required to use under the DFA stress testing rules to project revenues, losses, net income, and pro forma capital ratios.<sup>12</sup> In addition, for purposes of informing CCAR post-stress capital analysis, the Federal Reserve will estimate pro forma capital ratios in the supervisory severely adverse scenario based on the BHCs' planned capital actions as included in the BHC baseline scenario.

The Federal Reserve will publish both a summary of results of the supervisory stress test conducted under the DFA stress testing rules and a summary of the post-stress capital analysis component of the CCAR results by March 31.<sup>13</sup> In both cases, the results disclosed will be only those resulting from the stress tests under the supervisory severely adverse scenario.

Under the DFA stress testing rules, BHCs are also required to publish a summary of their stress test results under the supervisory severely adverse scenario (with DFA stress testing capital actions) between March 15 and March 31.<sup>14</sup> The Federal Reserve expects that the publication of summary results from both the supervisory and BHC-run stress tests will enhance public information about BHCs' financial condition and the ability of these BHCs to absorb losses as a result of adverse economic and financial conditions.

[bcbs189.pdf](#); see also Pub. L. No. 111-203, 124 Stat. 1376 (2010).

<sup>7</sup> 77 *Federal Register* 52792 (August 30, 2012).

<sup>8</sup> 77 *Federal Register* 52978 (August 30, 2012).

<sup>9</sup> 77 *Federal Register* 53060 (August 30, 2012).

<sup>10</sup> See Basel Committee on Banking Supervision (2011), "Global Systemically Important Banks: Assessment Methodology and the Additional Loss Absorbency Requirement," rules text, (Basel: BCBS, November), [www.bis.org/publ/bcbs207.htm](http://www.bis.org/publ/bcbs207.htm).

<sup>11</sup> 77 *Federal Register* 62378, 62394–95 (October 12, 2012), to be codified at 12 CFR 252.146(b).

<sup>12</sup> See id. at 62387, 62385.

<sup>13</sup> See id. at 62392, to be codified at 12 CFR 252.136(b) and (c).

<sup>14</sup> See id. at 62395, to be codified at 12 CFR 252.148(c).



# Instructions for Submission of Capital Plans

This instructions document provides

- general logistics for BHCs' capital plan submissions;
- guidelines surrounding the mandatory elements of a capital plan;
- information on what the Federal Reserve will assess during CCAR and a description of how the Federal Reserve will quantitatively assess the planned capital distributions;
- information on the Federal Reserve's response to capital plans and planned actions;
- limited adjustments BHCs may make to their planned capital distributions during the CCAR exercise;
- a discussion of planned disclosures at the end of the CCAR exercise;
- information related to required resubmissions following CCAR; and
- information for BHCs requesting incremental capital distributions following CCAR.

In addition, [appendix 1](#) provides supervisory expectations for effective capital adequacy processes (CAP).

## Submission Format and Timing

Each BHC's capital plan, along with any proposals for planned capital actions, should be approved by the BHC's board of directors, or committee thereof, and submitted to the Federal Reserve no later than January 5 of each calendar year in accordance with the capital plan rule. As noted earlier, the Federal Reserve may extend this date. For CCAR 2013, capital plans and proposals for capital actions must be received no later than January 7.

In connection with the annual CCAR exercise, the Federal Reserve will use the data and information

provided in the FR Y-14A, FR Y-14Q, and FR Y-14M regulatory reports as of September 30 of each calendar year (except for trading and counterparty data, as discussed in more detail below). BHCs should reference the instructions associated with each schedule to determine the appropriate submission date for each regulatory report.<sup>15</sup> Data reported on the FR Y-14Q and FR Y-14M schedules will be used as the primary input to the annual supervisory stress test conducted by the Federal Reserve under the DFA stress testing rules and will be used in the CCAR analysis. BHCs will report on the FR Y-14A schedules their estimates of losses, resources available to absorb those losses, balance sheet positions, and capital composition on a quarterly basis over the nine-quarter planning horizon, beginning with the fourth quarter of the current calendar year.

BHCs are also required to submit qualitative information supporting their loss and pre-provision net revenue (PPNR) estimates, including descriptions of the methodologies used to produce the estimates, as well as any other analyses that support their capital plans.

Each BHC must submit its capital plan and any supporting information, including the FR Y-14A and FR Y-14Q schedules, to the Federal Reserve through a secure collaboration site. BHCs should continue to submit FR Y-14M schedules using established processes outlined within the instructions for each regulatory report.<sup>16</sup>

## Coverage of the Submission

CCAR is a comprehensive assessment that will take into account all relevant risks to the BHC, such as estimates of potential losses, including any that are not explicitly covered by the information requested in the FR Y-14A, FR Y-14Q, and FR Y-14M. It is the

<sup>15</sup> See [www.federalreserve.gov/reportforms](http://www.federalreserve.gov/reportforms).

<sup>16</sup> See *id.*

responsibility of each BHC to capture all potential sources of losses from all on- and off-balance sheet positions, as well as any other events that have the potential to impact capital in both baseline and stress environments. Notably, the Federal Reserve will place particular focus on assessing the BHC stress scenario analysis as part of the supervisory assessment of the completeness and suitability of each BHC's capital plan.<sup>17</sup>

A BHC's submission of its pro forma, post-stress capital projections in its capital plan, inclusive of planned capital actions, must begin with data as of September 30, and span the nine-quarter planning horizon, beginning in the fourth quarter of the current calendar year and conclude at the end of the fourth quarter, two years out. For CCAR 2013, the planning horizon will commence at the beginning of the 4Q12 (October 1, 2012) and conclude at the end of the 4Q14 (December 31, 2014). The only exception to this planning horizon is with respect to the Basel III transition plan.

- The as-of date for trading and counterparty positions will be communicated to BHCs that are subject to the global market shock component of the supervisory scenarios by December 1.
- The Basel III and Dodd-Frank schedule required under the FR Y-14A should be reported as of September 30 of the current calendar year with projections through December 31, five years out. For CCAR 2013, data should be reported as of September 30, 2012, through December 31, 2017, under the supervisory and BHC baseline scenarios.

## Incomplete Data

In general, all BHCs are required to report all data elements asked for in the FR Y-14A, FR Y-14Q, and FR Y-14M schedules; however, certain schedules, worksheets, or data elements may be optional for a BHC. The instructions for the FR Y-14A, FR Y-14Q, and FR Y-14M schedules provide details on how to determine whether a BHC must submit a specific schedule, worksheet, or data element.

Under the capital plan rule, failure to submit complete data to the Federal Reserve in a timely manner

may be a basis for objection to a capital plan.<sup>18</sup> A BHC's inability to provide required data by the due dates may affect supervisory estimates of losses and PPNR for the BHC, and bears on the Federal Reserve's qualitative assessment of the internal risk measurement and management practices supporting a BHC's capital adequacy processes.

For the FR Y-14Q and FR Y-14M schedules, BHCs may be asked to resubmit data—either in whole or in part—after the initial due date as specified in the associated report instructions if required data elements are missing or errors are found during the data validation process.<sup>19</sup> All resubmissions of data as of September 30 will be due on or before December 31 of the current calendar year. After this date, the Federal Reserve will adhere to the following guidelines on any remaining FR Y-14Q and FR Y-14M data-related issues, for the purpose of producing supervisory estimates.

- *Missing data or data deficiency:* If a BHC's submitted data quality is deemed to be too deficient to produce a robust supervisory model estimate for a particular portfolio, the Federal Reserve may assign a high loss rate (e.g., 90th percentile) or a conservative PPNR rate (e.g., 10th percentile) based on portfolio losses or PPNR estimated for other BHCs. If data that are direct inputs to supervisory models are missing or reported erroneously but the problem is isolated in a way that the existing supervisory framework can be still used, a conservative value will be assigned to the specific data.
- *Immaterial portfolio:* Each BHC has the option to either submit or not submit the relevant data schedule for a given portfolio that does not meet a materiality threshold (as defined in FR Y-14Q and FR Y-14M instructions). If the BHC does not submit data on its immaterial portfolio(s), the Federal Reserve will assign a conservative loss rate (e.g., 75th percentile), based on the estimates for other BHCs. Otherwise, the Federal Reserve will estimate losses using data submitted by the BHC.

For the FR Y-14A schedules, BHCs should submit final and complete data for CCAR 2013 by January 7. BHCs may be asked to resubmit data—either in whole or in part—after this due date should errors or omissions be found; however, failure to submit

<sup>17</sup> See section 225.8(e)(1)(i)(A) of the capital plan rule. 12 CFR 225.8(e)(1)(i)(A).

<sup>18</sup> See section 225.8(e)(2)(ii) of the capital plan rule. 12 CFR 225.8(e)(2)(ii).

<sup>19</sup> Due dates are specified in the FR Y-14Q and FR Y-14M General Instructions, which are available on the Federal Reserve Board's [website](#). See *supra* note 15.

complete data to the Federal Reserve in a timely manner may be a basis for objection to a capital plan.

## Stress Testing Scenarios

For purposes of CCAR, BHCs will be required to submit the results of company-run stress tests based on three supervisory scenarios (DFA supervisory stress test scenarios), at least one stressed scenario developed by the BHC, and a BHC baseline scenario, as follows:

- *BHC baseline*: a BHC-defined baseline scenario<sup>20</sup>
- *BHC stress*: at least one BHC-defined stress scenario
- *Supervisory baseline*: a baseline scenario provided by the Federal Reserve under the DFA stress testing rules
- *Supervisory adverse*: an adverse scenario provided by the Federal Reserve under the DFA stress testing rules
- *Supervisory severely adverse*: a severely adverse scenario provided by the Federal Reserve under the DFA stress testing rules

The results of a BHC's analysis for each scenario should encompass all potential losses and other impacts to net income that the BHC might experience under the scenarios above. In all cases, BHCs should substantiate that their results are consistent with the specified macroeconomic and financial environment, and that the components of their results are internally consistent within each scenario.

For purposes of CCAR, the Federal Reserve will be incorporating both the supervisory stress test results and the BHC's ability to sufficiently capture their unique vulnerabilities within the BHC scenarios into the overall supervisory assessment of each BHC's capital plan. The Federal Reserve will focus particular attention on the processes surrounding the development and implementation of the BHC stress scenario to ensure that these processes are robust; that the scenario is of comparable severity for the BHC as the supervisory severely adverse scenario is for the banking industry as a whole, and that it captures and stresses key vulnerabilities and idiosyncratic risks fac-

ing the firm; and that the translation of the scenario into loss, revenue, and post-stress capital projections is conceptually sound and implemented in a well-controlled manner.

## Supervisory Scenarios

Under the DFA stress testing rules, the Federal Reserve will provide BHCs with a description of the supervisory scenarios no later than November 15 of the current calendar year.<sup>21</sup> As noted earlier, the Federal Reserve will provide a description of the market shock scenario by December 1. It is important to note that the scenarios provided by the Federal Reserve are not forecasts, but rather hypothetical scenarios to be used to assess the strength and resilience of BHC capital in baseline and stressed economic and financial market environments.

The Federal Reserve will evaluate the BHC's pro forma post-stress capital ratios resulting from the combination of stress performance measures (e.g., revenues, losses, and reserves from the supervisory severely adverse scenario) and the BHC's planned capital actions (e.g., planned dividends, issuance, and repurchases as provided in the BHC baseline scenario) against each minimum regulatory capital ratio and a 5 percent tier 1 common ratio.

For all scenarios except the supervisory baseline and supervisory severely adverse, a BHC should include only one capital worksheet within each FR Y-14A Summary schedule. For the BHC-defined scenarios, a BHC should include pro forma projections using the BHC's planned capital actions as deemed appropriate by the BHC for that scenario. For the supervisory adverse scenario, a BHC should include pro forma capital projections using the capital action assumptions required under the DFA stress testing rules.<sup>22</sup> For the supervisory baseline and supervisory severely adverse scenarios, a BHC should include two sets of pro forma projections, reported in two separate capital worksheets within the FR Y-14A Summary schedule—one set of projections using the BHC's planned capital actions under the BHC baseline scenario and another set using the DFA stress testing capital action assumptions as outlined above.

<sup>20</sup> A BHC may use the same baseline scenario as the supervisory baseline scenario if the BHC believes the supervisory baseline scenario appropriately represents its view of the most likely outlook for the risk factors salient to the BHC. Any BHC electing to do so should provide appropriate supporting documentation.

<sup>21</sup> 77 *Federal Register* 62394 (October 12, 2012), to be codified at 12 CFR 252.144(b).

<sup>22</sup> See 77 *Federal Register* 62395 (October 12, 2012), to be codified at 12 CFR 252.146(b).

**Table 2. Capital Worksheet Requirements**

Scenario	Capital Worksheet 1	Capital Worksheet 2
BHC Baseline	Planned Capital Actions	n/a
Supervisory Baseline*	Planned Capital Actions	DFA Stress Testing Capital Actions
BHC Stress	Alternative Capital Actions	n/a
Supervisory Adverse	n/a	DFA Stress Testing Capital Actions
Supervisory Severely Adverse	Planned Capital Actions	DFA Stress Testing Capital Actions
<p>* If a BHC determines the supervisory baseline scenario to be appropriate for its own BHC baseline, the BHC may submit identical FR Y-14A Summary schedules with the exception of the capital worksheets noted above. All BHCs must complete two capital worksheets for the supervisory baseline and supervisory severely adverse scenario.</p> <p>n/a Not applicable.</p>		

The following definitions and table 2 illustrate the number of capital worksheet requirements for each scenario's FR Y-14A schedule.

- *Planned Capital Actions*: a BHC's planned capital actions under the BHC baseline scenario
- *Alternative Capital Actions*: a BHC's assumed capital actions under the BHC stress scenario
- *DFA Stress Testing Capital Actions*: capital projections as required under the DFA stress testing rules<sup>23</sup>

Six BHCs with large trading operations will be required to include a global market shock component as part of their supervisory adverse and severely adverse scenarios, and conduct a stress test of their trading book, private equity positions, and counterparty credit exposures as of a particular market close date.<sup>24</sup> The Federal Reserve will provide a set of hypothetical shocks to the risk factors most relevant to the trading and counterparty positions. For CCAR 2013, these BHCs will also be required to submit additional data to the Federal Reserve related to their European Exposures in the form of a supplemental template. This request will be issued no later than December 1, 2012, along with the set of hypothetical risk factor shocks.

<sup>23</sup> Id.

<sup>24</sup> The six bank holding companies participating in trading shock are Bank of America Corporation; Citigroup Inc.; The Goldman Sachs Group, Inc.; JPMorgan Chase & Co.; Morgan Stanley; and Wells Fargo & Company.

## BHC Baseline and Stress Scenarios

A BHC's scenario design process should involve development of scenarios that affect the BHC as a whole, stemming from macroeconomic and financial market conditions, and should also include potential BHC-specific events. Assumptions should remain constant across business lines and risk areas for the chosen scenario, since the objective is to see how the BHC as a whole will be affected by a common and internally consistent scenario. A BHC should consider the best manner in which to capture combinations of stressful events and circumstances, including second-order and "knock-on" effects that may result from the specified economic and financial environment or any potential BHC-specific event.

The BHC baseline scenario should reflect the BHC's view of the expected path of the economy over the planning horizon. A BHC may use the same baseline scenario as the Federal Reserve baseline scenario if the BHC believes the Federal Reserve baseline scenario appropriately represents their view of the most likely outlook for the risk factors salient to the BHC.<sup>25</sup>

The BHC stress scenario should be based on a coherent, logical narrative of a severely adverse economic and financial market environment and potential BHC-specific events. The scenario narrative should detail key events and circumstances that occur in the scenario. As required in the FR Y-14A Scenario schedule, BHCs must provide the quarterly trajectories of key macroeconomic and financial variables for its BHC baseline and BHC stress scenario.

A BHC's stress scenario should describe a severely adverse hypothetical combination of circumstances designed with the BHC's particular vulnerabilities in mind. Specifically, and as noted above, the BHC stress scenario should be designed to stress factors that affect all of its material exposures and activities, capturing potential exposures from both on- and off-balance sheet positions. In addition, the forward-looking analysis required in the BHC stress scenario should be relevant to the direction and strategy set by a BHC's board of directors.<sup>26</sup>

<sup>25</sup> See supra note 20.

<sup>26</sup> Additional guidance related to scenario development as part of stress testing can be found in SR letter 12-7, "Supervisory Guidance on Stress Testing for Banking Organizations with More Than \$10 Billion in Total Consolidated Assets," [www.federalreserve.gov/bankinfo/srletters/sr1207.htm](http://www.federalreserve.gov/bankinfo/srletters/sr1207.htm).

## Correspondence Related to CCAR

All correspondence and questions regarding this exercise and related issues should be communicated to a secure mailbox, the address to which will be provided directly to the 19 CCAR BHCs. Questions will be catalogued and, where appropriate, written responses (removing any BHC identifying informa-

tion) will be provided to all BHCs via secure e-mail. Any BHC-specific questions submitted to the secure mailbox will be addressed only with the relevant BHC via the same secure mailbox. If needed, meetings may be scheduled to discuss submitted questions in more detail; however, only those responses that come through the secure mailbox will be considered official.





# Mandatory Elements of a Capital Plan

The capital plan rule defines a capital plan as “a written presentation of a company’s capital planning strategies and capital adequacy process that includes certain mandatory elements.” These mandatory elements are organized into five main components:

1. an assessment of the expected uses and sources of capital over the planning horizon
2. a description of all planned capital actions over the planning horizon
3. a discussion of any expected changes to the BHC’s business plan that are likely to have a material impact on the BHC’s capital adequacy or liquidity
4. a detailed description of the BHC’s process for assessing capital adequacy
5. a BHC’s capital policy<sup>27</sup>

A BHC is required to conduct an assessment of the expected uses and sources of capital over the planning horizon assuming both expected and stressful conditions. This assessment must contain the following elements:

- estimates of projected revenues, losses, reserves, and pro forma capital levels, including any regulatory capital ratios (for example, leverage, tier 1 risk-based, and total risk-based capital ratios) and any additional capital measures deemed relevant by the BHC, over the planning horizon under expected conditions and under a range of stressed scenarios, including any scenarios provided by the Federal Reserve and at least one stress scenario developed by the BHC appropriate to its business model and portfolios
- a calculation of the pro forma tier 1 common ratio over the planning horizon under expected conditions and under a range of stressed scenarios and discussion of how the company will maintain all minimum regulatory capital ratios and a pro forma

tier 1 common ratio above 5 percent under expected conditions and the stressed scenarios required

- a discussion of the results of the stress tests required by law or regulation, and an explanation of how the capital plan takes these results into account
- a description of all planned capital actions over the planning horizon

The remainder of this section provides additional detail on these elements.

## Estimates of Projected Revenues, Losses, Reserves, and Pro Forma Capital Levels

As noted above, for the purposes of CCAR, BHCs are to submit capital plans supported by their internal capital adequacy assessment and capital planning processes and include pro forma analyses in each of the five scenarios. The Federal Reserve will be assessing the processes and practices the BHCs have in place to carry out this analysis, including the risk identification, measurement, and management practices supporting their analyses, as well as the governance and controls around these practices. (See [appendix 1](#) for a discussion of supervisory expectations for capital adequacy processes that support a BHC’s capital plan.)

Importantly, the format the Federal Reserve uses to collect the FR Y-14 data does not imply that BHCs should use any specific methodology to project their losses and revenues for their stress tests or for any other internal analysis used to support their capital plans; rather, a BHC’s submissions for each scenario should be based on its own processes and analyses.

The Federal Reserve’s qualitative assessment of the capital plans will focus on the robustness of a BHC’s internal capital adequacy processes, with a particular

<sup>27</sup> See section 225.8(d)(2) of the capital plan rule. 12 CFR 225.8(d)(2).

focus on the BHC stress scenario and the translation of the BHC stress scenario into projected losses, revenues, and post-stress pro forma capital ratios.

In all cases, BHCs should demonstrate that their results are consistent with the macroeconomic and financial environments specified in the scenarios being used, and that the various components of their results are internally consistent. For example, it might be inconsistent to project a shrinking balance sheet while also projecting large increases in net income in a stress or baseline environment. BHCs should submit background information on the methodologies supporting their estimates. This material should include discussion of key approaches and assumptions used to measure BHC-wide exposures and to arrive at stress loss estimates, along with relevant background on positions or business lines that could have a material influence on outcomes.

A BHC should clearly identify and document in its capital plan any aspects of its portfolios and exposures (e.g., a contractual loss mitigation arrangement, exposures not well captured in the reporting framework, etc.) that are not adequately captured in the FR Y-14Q or FR Y-14M and that it believes are material to loss estimates for its portfolios, as well as the BHC's estimate of the potential impact of such items on loss estimates under the baseline and stress scenarios.

In general, BHCs should incorporate the following into their pro forma estimates:

*Definition of losses for loans:* The losses to be estimated for loans held in accrual portfolios in this exercise are generally credit losses due to failure to pay obligations (cash flow losses), rather than discounts related to mark-to-market (MTM) values. In some cases, BHCs may have loans that are being held for sale or which are subject to purchase accounting adjustments. In these cases, the analysis should anticipate the change in value of the underlying asset, apply the appropriate accounting treatment, and determine the incremental losses.

*Loan-loss estimates:* BHCs should describe the underlying models and methods used to project loan losses, and provide background on the derivation of estimated losses. Factors that could be cited to support the reasonableness of estimated losses include (but are not limited to) composition of the loan portfolios within a broad category (e.g., distribution among Prime, Alt-A, and subprime loans within first

lien residential mortgages) and specific characteristics of the portfolio within categories or subcategories (e.g., vintage, credit score, loan-to-value ratio, regional distribution, industry mix, ratings distribution, or collateral type). Hypothetical behavioral responses by BHC management should not be considered as mitigating factors for the purposes of this analysis. For example, hedges already in place should be accounted for as potential mitigating factors, but not assumptions about potential future hedging activities.

*Commitments and contingent and potential obligations:* The analysis should reflect expectations of customer draw-downs on unused credit commitments under each scenario, as well as any assets and exposures that might be taken back on the balance sheet or otherwise generate losses under stressful economic conditions (e.g., assets held in asset-backed commercial paper conduits and other off-balance sheet funding vehicles to which the BHC provides support). Unconsolidated entities to which the BHC has potential exposure are also within the scope of this exercise and should be considered. If it is envisioned that non-contractual support may be provided during a stressful environment for certain obligations or exposures of sponsored or third-party entities, these should be included in a BHC's analysis of contingent or potential obligations, and all associated impacts should be captured.

*Losses on available-for-sale (AFS) and held-to-maturity (HTM) securities:* Each BHC should provide projected other-than-temporary impairments (OTTI) for AFS and HTM securities. OTTI projections should be based on September 30, 2012 positions and should be consistent with specified macroeconomic assumptions and standard accounting treatment. If the BHC bifurcates credit losses from other losses, the method for deriving the bifurcation should be provided in supporting documentation.

*Allowance for loan losses:* BHCs should estimate the portion of the current allowance for loan losses available to absorb credit losses on the loan portfolio for each quarter under each scenario, while maintaining an adequate allowance along the scenario path and at the end of the scenario horizon. Loan-loss reserve adequacy should be assessed against the likely size, composition, and risk characteristics of the loan portfolio throughout the planning horizon in a manner that is consistent with the BHC's projections of losses over that scenario.



*Non-U.S. exposures:* Loss, revenue, and loan-loss reserve projections should cover positions and businesses for the BHC on a global consolidated basis. To the extent that loss experience on foreign positions is projected to differ from that on U.S. positions, BHCs should provide supporting information to explain those differences. For example, if the BHC is using different loss rates for foreign positions, those foreign positions should be explicitly identified and reported separately, by position or loan type, in the BHC's supporting documentation.

*Risk-weighted asset (RWA) projections:* BHCs should provide detailed support for all assumptions used to derive projections of RWAs, including assumptions related to components of balance sheet projections (on- and off-balance sheet balances and mix), income statement projections, underlying risk attributes of exposures, and any known weakness in the translation of assumptions into RWA estimates for each scenario. For example, BHCs should demonstrate how credit RWAs over the projection horizon are related to projected loan growth under the macroeconomic scenario, increased credit provisions or charge-offs for loan portfolios, and changing economic assumptions; and how market RWAs are related to market factors (e.g., equity index levels and bond spreads) and projected trading revenue.

BHCs should demonstrate that these assumptions are clearly conditioned on a given scenario and are consistent with stated internal and external business strategies. If BHC-specific assumptions (other than broad macroeconomic assumptions) are used, BHCs should also describe these assumptions and how they relate to reported RWA projections. If the BHC's models for projecting RWAs rely upon historical relationships, BHC should provide the historical data and clearly describe why these relationships are expected to be maintained in each scenario.

To facilitate the Federal Reserve's analysis of RWA projections, BHCs will be required to submit additional data to the Federal Reserve related to the balance of total RWAs reported on the Capital worksheet of the FR Y-14A Summary schedule, including a decomposition of overall RWA projections into components reflecting, as appropriate, credit RWAs, counterparty credit RWAs and market-risk-related RWAs. This request will be issued no later than December 1 of the current calendar year.

*Treatment of trading and counterparty RWA:* BHCs subject to the market-risk rule must use the following

procedures to project RWAs over the planning horizon for any positions subject to the market-risk rule. For the first quarter of the planning horizon, BHCs must use the market-risk capital rules in effect on December 31, 2012, for purposes of identifying positions subject to the market-risk rule and projecting the RWA amount of these positions.<sup>28</sup> For the second through ninth quarters of the planning horizon, BHCs must use the market-risk capital rules that will be in effect on January 1, 2013, for purposes of identifying positions subject to the market-risk rule and projecting the RWA amount of these positions in each quarter.<sup>29</sup>

Any BHC that has not received approval from the Federal Reserve for one or more models as of January 6, 2013, must follow the procedures in the applicable market-risk rules to determine the RWA of any position or portfolio that is not covered by an approved model. For example, for purposes of any RWA calculations in the first quarter of the planning horizon, a BHC must use standard specific risk charges for any position(s) for which the BHC has not received specific risk model approval as of December 31, 2012. Similarly, for purposes of any RWA calculations in the second through ninth quarters of the planning horizon, a BHC must use standard specific risk charges for any position(s) or portfolio(s) for which the BHC has not received specific risk model approval, incremental risk model approval, or comprehensive risk model approval as of January 6, 2013. In addition, if a BHC does not have an approved Stressed Value at Risk (SVaR) model as of January 6, 2013, the Federal Reserve will specify a substitute capital requirement for this charge. By December 3, 2012, the Federal Reserve will notify in writing each BHC without an approved SVaR model of the applicable requirement.<sup>30</sup>

*Balance sheet projections:* Balance projections are a critical input to loss and revenue estimates. BHCs are expected to demonstrate that the approach used to generate those projections is consistent internally, with related processes, and externally, with implications of the macroeconomic scenario. Ultimately, balances are driven by the dynamic interaction of various flows through the planning horizon. The models and business processes used to make balance

<sup>28</sup> 12 CFR part 225, appendix E.

<sup>29</sup> See Market Risk Final Rule.

<sup>30</sup> See 77 *Federal Register* 53060, 53100 (August 30, 2012), to be codified at 12 CFR part 225, appendix E, section 1(c).

projections should be sufficiently documented so as to allow for supervisory assessment.

Balance projections should reconcile to projections for originations, pay-downs, draw-downs, and losses under each scenario. In stressed macroeconomic scenarios, care should be taken to justify major changes in portfolio composition based, for example, on assumptions about a BHC's strategic direction, including events such as material sales or purchases. Loan balance projections should be consistent with internally generated paths of originations, pay-downs, draw-downs, losses, purchases, and sales under any scenario. The losses used in producing balances should be the same as those produced in internal loss estimate modeling for the stress test. Prepayment behavior should link to the relevant economic scenario and the maturity profile of the asset portfolio. Any assumed reallocation of assets into securities or cash should recognize the limits of portfolio transformation under stress due to market pressures and current portfolio characteristics, including the likely state of interbank lending markets and deposit levels.

External consistency is also an important consideration for balance projections. To the extent that changes in the balance sheet are driven by a BHC's strategic direction, care should be taken to document and explain in detail that underlying assumptions are reasonable in a stressed economic environment. Specifically, BHCs should evaluate the consequences of other market participants possibly taking actions similar to their own in a stressed environment—e.g., the possible positive outcomes that might be obtained if a BHC were to be the only market participant taking such actions in a particular market environment are likely to be mitigated if others are also attempting to take similar actions.

*Global market shock for the six largest trading firms:* Six BHCs with substantial trading and counterparty exposures (trading BHCs) are required to apply a global market shock to their trading book, private equity positions, and counterparty credit exposures as of a particular market close date and estimate losses.<sup>31</sup> The Federal Reserve will provide to these trading BHCs a set of hypothetical shocks to the risk factors most relevant to their trading, private equity and counterparty positions and the date as of which

the shocks should be applied no later than December 1 of the current calendar year.<sup>32</sup>

Trading BHCs must use the set of hypothetical risk factor shocks the Federal Reserve provides to produce the profit and loss (P/L) estimates for their trading, private equity, and counterparty credit, and MTM losses for fair-value assets not held in trading, including loans held for sale or held for investment with the fair-value option, and AFS securities. All estimated losses associated with the global market shock the Federal Reserve provides as part of the supervisory scenarios should be reported in the first quarter of the planning horizon.

In cases in which the specified shocks are not directly compatible with the BHC's internal systems, the BHC is expected to interpolate or extrapolate around the given points to determine the appropriate shock. Supporting documentation should include a description of the methods used to interpolate or extrapolate. In cases where there are nonlinearities, BHCs should not simply multiply their exposures by the corresponding shocks to arrive at a purely linear P/L estimate, but should instead use full-revaluation methods to compute their loss estimates.

The result of the global market shock is to be taken as an instantaneous loss and reduction of capital calibrated on the size of applicable trading book positions, private equity positions, and counterparty credit exposures as of a point in time. BHCs should not assume a related decline in portfolio positions or risk-weighted assets as a result of these market shock losses. The global market shock should be treated as an add-on that is exogenous to the macroeconomic and financial market environment specified in the supervisory stress scenarios.

*Fair-value loans:* BHCs may have loans that are held for sale or held for investment, for which they have adopted fair-value accounting (collectively, fair-value loans). For fair-value loans not held in the trading account, trading BHCs should apply the risk factor shocks for comparable assets in their trading books, taking into account any forward sales already in place. The shocks applied to retail and commercial real estate whole loans should be generally consistent with the risk factor shocks provided for relevant AAA-rated whole loans. The corporate loan shocks should be generally consistent with the risk factor

<sup>31</sup> The six BHCs participating in trading shock are Bank of America Corporation; Citigroup Inc.; The Goldman Sachs Group, Inc.; JPMorgan Chase & Co.; Morgan Stanley; and Wells Fargo & Company; see also section 225.8(c) of the capital plan rule.

<sup>32</sup> The risk factor shocks will be provided in a format that is analogous to that of the FR Y-14Q schedule for Trading, Private Equity, and Other Fair Value Assets.

shocks provided for corporate loans. If trading BHCs use different assumptions, they should provide supporting documentation that includes the assumptions and explanations for why the assumptions used are more appropriate than those provided by the Federal Reserve.

All other BHCs should report any estimated changes in the value of fair-value loans in other non-interest income under the conditions specified in the macro-economic scenario (i.e., supervisory baseline, adverse, severely adverse, or BHC baseline or stress).

*Pre-provision net revenue (PPNR):* PPNR estimates should be consistent with the economic and financial environment specified in the relevant scenario. BHCs should ensure that PPNR projections are explicitly based on, and directly tie to, balance sheet and other exposure assumptions used for related loss estimates. In addition, BHCs should apply assumptions consistent with the scenario and resulting business strategy when projecting PPNR for fee-based lines of business (e.g., asset management), while ensuring that expenses are appropriately taking into account both the direct impacts of the economic environment (e.g., foreclosure costs) and projected revenues.

*Residential mortgage representations and warranties:* As part of PPNR, BHCs will be expected to estimate losses associated with requests by mortgage investors, including both government-sponsored enterprises and private-label securities holders, to repurchase loans deemed to have breached representations and warranties, or with investor litigation that broadly seeks compensation from BHCs for losses. BHCs should consider not only how the macro scenarios could affect losses from repurchased loans, but also a range of legal process outcomes, including worse-than-expected resolutions of the various contract claims or threatened or pending litigation against the BHC and against various industry participants. BHCs should provide appropriate support of the adverse outcomes considered in their analysis.

*Mortgage-servicing rights (MSR):* All revenue and expenses related to MSRs and the associated non-interest income and non-interest expense line items should be reported on the PPNR schedules. BHCs should not report changes in value of the MSR asset or hedges within the trading shock. Therefore, if derivative or other MSR hedges are placed in the trading book for FR Y-9C purposes and in alignment with Generally Accepted Accounting Principles, these hedges should not be stressed as part of the

market shock scenario for CCAR purposes. Also, any BHCs that have adopted fair-value accounting for all or part of the MSR must not include the MSR in the market shock exercise.

*Operational-risk losses:* Projections of losses arising from inadequate or failed internal processes, people and systems, or from external events should be reported by the BHC as operational-risk losses, a component of PPNR. As highlighted in the FR Y-14A Summary schedule instructions, examples of operational-risk loss events include those losses related to improper business practices (including class action lawsuits), execution errors, and fraud. BHCs should specifically consider the possibility of support for BHC-sponsored entities, as well as potential for charges related to legal reserves and provisions.

*Trading revenues in PPNR:* All BHCs are expected to project PPNR, including trading-related revenues, conditional on the specifications of the assumed macroeconomic scenario (supervisory baseline, adverse, and severely adverse, and BHC baseline and stress). In this regard, all BHCs with trading activities and private equity investments, including those BHCs that are not required to apply the global market shock, should estimate any potential profit and loss impact that these positions might experience under the macroeconomic scenario. Estimated impacts should include those stemming from potential defaults on credit sensitive positions held in the trading account and from counterparty credit exposures, and valuation declines (and recoveries specific to those declines) on loans, securities and other trading or MTM positions, and private equity investments (regardless of the portfolio in which a private equity position is booked). Private equity-related loss estimates should be broken out from other trading or MTM loss and should include consideration of drawdowns against commitments.

In making these projections, BHCs should demonstrate that their historical data selection and general approach is credible and applicable for the assumed macroeconomic scenario. BHCs should not assume that trading-related PPNR could never fall below historical levels.

For the trading BHCs, these projections should be made without consideration of any MTM losses on trading BHCs' portfolios that result from the global market shock. The MTM losses resulting from the global market shock should be treated as separate,

one-time losses that occur in the first quarter of the planning horizon (e.g., 4Q12, for CCAR 2013). Therefore, BHCs subject to the market shock should not assume any interaction between the global market shock and projections of PPNR in the form of management actions (such as expense cuts) that would be taken in light of the shock to the trading portfolio or recoveries of the losses resulting from the market shock over the scenario time horizon.

*Basel III:* BHCs are to include estimates, under the supervisory baseline scenario, of the composition and levels of regulatory capital, risk-weighted assets, and leverage ratio exposures used to calculate minimum regulatory capital ratios (including the capital conservation buffer and any SIFI surcharge that may be required) under the Basel III framework, as set forth by the Final Market Risk Rule and the proposed requirements of the Basel III NPR, the Advanced Approaches NPR for applicable BHCs, and the Basel Committee's SIFI surcharge framework. Each BHC's submission should include supporting documentation on all material planned actions that the BHC intends to pursue in order to meet the proposed Basel III target ratios, including, but not limited to, the run-off or sale of existing portfolio(s), the issuance of regulatory capital instruments and other strategic corporate actions. Where applicable, each BHC should include in its capital plan its best estimate of the SIFI surcharge the BHC expects to be subject to, along with an explanation for its estimate.

*Regulatory capital:* BHCs are to provide data on the balances of regulatory capital instruments under current U.S. capital adequacy guidelines, aggregated by instrument type based on actual balances as of September 30 of the current calendar year and projected balances as of each quarter end through the remaining planning horizon.<sup>33</sup> BHCs are to report information both on a notional basis and on the basis of the dollar amount included in regulatory capital.

## Supporting Documentation for Analyses Used in Capital Plans

*Documentation of risk-measurement practices:* Capital plan submissions should include documentation of key risk identification and measurement practices supporting the BHC-wide stress testing required in

the capital plans. As previously noted, an assessment of the robustness of these practices is a critical aspect of the supervisory assessment of capital adequacy processes, and their application under the BHC stress scenario will be a particular area of supervisory focus.

*Documentation of internal stress testing methodologies:* BHCs should include in their capital plan submissions thorough documentation that describes key methodologies and assumptions for performing stress testing on their portfolios. Documentation should clearly describe the model development process, the derivation of outcomes, and validation procedures, as well as assumptions concerning new growth and changes to credit policy. Supporting documentation should clearly describe internal controls and governance processes around the development of capital plans. Senior management should provide boards of directors with sufficient information to facilitate the board's full understanding of the stress testing used by the BHC for capital planning purposes.

*Assumptions and approaches:* BHCs should provide credible support for BHC-specific assumptions, including any known weaknesses in the translation of assumptions into loss and resource estimates. An overreliance on past patterns of credit migration (the basis for roll rate and ratings transition models) may be a weakness when considering stress scenarios. BHCs should demonstrate that their approaches are clearly conditioned on the scenario under study. While judgment is an essential part of risk measurement and risk management, including for loss estimation purposes, BHCs should not be overly reliant on judgment to prepare their loss estimates and should provide documentation or evidence of transparency and discipline around the process. Any management judgment applied should be adequately supported and in line with scenario conditions, should be consistently conservative in the assumptions made to arrive at loss rates, and there should be appropriate challenge of assumptions by senior management and the board of directors.

*Documentation related to the BHC scenario assumptions:* BHCs should include appropriate documentation related to their individual approach to the BHC baseline and BHC stress scenario in their capital plan submission. As detailed in the FR Y-14A Scenario Schedule instructions, BHCs are required to provide detailed supporting documentation and a listing of all key variables assumed for each scenario. The Scenario Schedule should be complete, and the variables

<sup>33</sup> See 12 CFR part 225, Appendices A, D, E, and G; see also section 225.8(c) of the capital plan rule.



listed should be comprehensive and appropriate for each BHC. In addition, BHCs should provide detailed documentation describing all methodologies and key assumptions impacting the BHCs' loss and PPNR estimates. Supervisors will focus particular attention on a BHC's ability to adequately support the approach and methodologies used for its BHC scenarios.

*Validation and independent review:* In addition to being properly documented, models employed by BHCs should be independently validated or otherwise reviewed in line with model-risk management expectations presented in existing supervisory guidance. While use of existing risk-measurement models and processes provides a useful reference point for considering stress scenario potential loss estimates, BHCs should consider whether these processes generate outputs that are relevant in a stressful scenario. Use of such models may need to be supplemented with other data elements and alternative methodologies. It is critical that BHCs assess the vulnerability of their models to error, understand any other limitations, and consider the risk to the BHC should estimates based on those models prove materially inaccurate.<sup>34</sup>

## Description of All Planned Capital Actions over the Planning Horizon

A BHC's capital plan must describe all planned capital actions over the planning horizon. As described in the capital plan rule, a capital action is any issuance of a debt or equity capital instrument, capital distribution, and any similar action that the Federal Reserve determines could impact a BHC's consolidated capital. A capital distribution is a redemption or repurchase of any debt or equity capital instrument, a payment of common or preferred stock dividends, a payment that may be temporarily or permanently suspended by the issuer on any instrument that is eligible for inclusion in the numerator of any minimum regulatory capital ratio, and any similar transaction that the Federal Reserve determines to be in substance a distribution of capital.

To meet the requirements of the DFA stress testing rule, a BHC must calculate its pro forma capital ratios using the following assumptions regarding its

capital actions over the planning horizon for each of the supervisory baseline scenario, the supervisory adverse scenario, and the supervisory severely adverse scenario:

- for the first quarter of the planning horizon, the BHC must take into account its actual capital actions taken throughout the quarter
- for each of the second through ninth quarters of the planning horizon, the BHC must include in the projections of capital
  - common stock dividends equal to the quarterly average dollar amount of common stock dividends that the company paid in the previous year (that is, the first quarter of the planning horizon and the preceding three calendar quarters)
  - payments on any other instrument that is eligible for inclusion in the numerator of a regulatory capital ratio equal to the stated dividend, interest, or principal due on such instrument during the quarter
  - an assumption of no redemption or repurchase of any capital instrument that is eligible for inclusion in the numerator of a regulatory capital ratio<sup>35</sup>

As part of the CCAR capital plan submission, BHCs should calculate pro forma capital ratios using their planned capital actions over the planning horizon under the BHC baseline scenario and the alternative capital actions projected to be taken under the BHC stress scenario. With respect to the planned capital actions under the BHC baseline scenario,

1. for the first quarter of the planning horizon, the BHC must take into account the actual capital actions taken during that quarter; and
2. for each of the second through ninth quarters of the planning horizon, the BHC must include any capital actions proposed in its capital plan.

In the second quarter of the planning horizon, a BHC should include capital actions in an amount that is no greater than the amount in the BHC's most recently approved capital plan. For net repurchases in the second quarter of the planning horizon, the BHC should submit an amount not greater than the unused portion of cumulative net repurchases under the BHC's most recently approved capital plan,

<sup>34</sup> See SR letter 11-7, "Guidance on Model Risk Management," [www.federalreserve.gov/bankinfo/srletters/sr1107.htm](http://www.federalreserve.gov/bankinfo/srletters/sr1107.htm), for additional information regarding model validation.

<sup>35</sup> 77 *Federal Register* 62378, 62394–95 (October 12, 2012), to be codified at 12 CFR 252.146(b).

where cumulative for CCAR 2013 is defined as the period beginning in 2Q12 and ending in 1Q13.

With respect to a BHC's projections under the supervisory baseline and severely adverse scenarios, the BHC must calculate two sets of pro forma capital ratios on the two capital worksheets within the FR Y-14A Summary schedule using (1) the prescribed capital actions under the DFA stress testing rule; and (2) the BHCs planned capital actions in the BHC baseline scenario. As described below, the planned capital actions under consideration by the Federal Reserve in its supervisory stress test under the capital plan rule will be those proposed in the BHC baseline scenario.

### Expected Changes to Business Plans Affecting Capital Adequacy or Funding

Each BHC should include in its capital plan a discussion of any expected changes to the BHC's business plan that are likely to have a material impact on the BHC's capital adequacy and funding profile. Examples of changes to a business plan that may have a material impact could include a proposed

merger or divestiture, changes in key business strategies, or significant investments. In this discussion, the company should consider not just the impacts of these expected changes, but also the potential adverse consequences should the actions described above not result in the planned changes—e.g., a merger plan falls through, a change in business strategy is not achieved, or there is a loss on the planned significant investment.

### Supervisory Expectations for a BHC's Capital Adequacy Process (CAP)

An important component of a BHC's capital plan is a description of the BHC's process for assessing capital adequacy.<sup>36</sup> A BHC's CAP should reflect a full understanding of its risks and ensure that it holds capital corresponding to those risks to maintain capital adequacy. The detailed description of a company's CAP should include a discussion of how, under stressful conditions, the BHC will maintain capital commensurate with its risks—above the minimum regulatory capital ratios—and serve as a source of strength to its depository institution subsidiaries.

<sup>36</sup> See appendix 1 for a detailed description of supervisory expectations for CAP.

# Supervisory Assessments of Capital Plans

To support its assessment of the capital plans, the Federal Reserve will review the supporting analyses in a BHC's capital plan, including the BHC's own stress test results, and will generate supervisory estimates of losses; revenues; loan-loss reserves; and pro forma, post-stress capital ratios using internally developed supervisory models and assumptions wherever possible. Supervisory models and assumptions will be applied in a consistent manner across all BHCs. Where it may not be feasible to develop results directly through the use of supervisory models, the Federal Reserve may incorporate into its supervisory estimates one or more of the following: (1) BHC estimates, reviewed and adjusted (where applicable) by the Federal Reserve to ensure the scenario was applied as specified and BHC's assumptions of potential losses and earnings reflect a credible and conservative translation of the impacts from the stress scenario; (2) industry models; and (3) simple decision rules using conservative assumptions consistently applied across all BHCs.

## Quantitative Assessments

The various types of quantitative assessments that the Federal Reserve expects to consider are described in [figure 1](#):

### Pro Forma Capital Ratios

As part of CCAR, the Federal Reserve will use BHCs' planned capital actions in the BHC baseline scenario as the actions that are subject to supervisory evaluation in the baseline scenario and in the supervisory severely adverse scenario. In other words, the Federal Reserve will in part be assessing if a BHC would be capable of continuing to meet supervisory expectations for minimum capital ratios (the leverage, tier 1 risk-based, and total risk-based capital ratios) and a tier 1 common capital ratio of at least 5 percent throughout the planning time horizon even if

**Figure 1. Quantitative Assessments of Capital Actions**

Pro Forma Capital Ratios	Common Dividend Payout Ratio	Basel III Transition Path
BHC Stress Alternative Capital Actions		
Supervisory Adverse DFA Stress Testing Capital Actions	BHC Baseline* Planned Capital Actions	
Supervisory Severely Adverse Planned Capital Actions DFA Stress Testing Capital Actions		Supervisory Baseline* Planned Capital Actions DFA Stress Testing Capital Actions

Note: Each box indicates a distinct scenario that will be submitted by each BHC. Planned capital actions are estimated by each BHC using the BHC baseline scenario and the alternative capital actions are estimated under the BHC's stress scenario in accordance with the BHC's internal capital policies.

\*If a BHC determines the supervisory baseline scenario to be appropriate for their own BHC baseline, the BHC may submit identical FR Y-14A Summary schedules with the exception of the capital worksheets noted above. All BHCs must complete two capital worksheets for the supervisory baseline and supervisory severely adverse scenario.

severely adverse stress conditions emerged and the BHC did not reduce planned capital distributions.

A quantitative assessment of the appropriateness of planned capital actions will also be evaluated based on its common dividend payout ratio (common dividends relative to net income available to common shareholders) in the baseline scenarios, and its projected path to compliance with Basel III under the supervisory baseline scenario as Basel III is phased in in the United States.

Changes to proposed capital distributions after the initial submission may require submission of a revised plan in a subsequent quarter.<sup>37</sup> The Federal Reserve will use the dollar amount of distributions contained in a BHC's FR Y-14A when assessing capital plans. The Federal Reserve's decision to object, or issue a notice of non-objection, to a capital plan will be specific to each BHC's planned capital actions.

### Common Dividend Payouts

The Federal Reserve expects that capital plans will reflect conservative common dividend payout ratios. In particular, requests that imply common dividend payout ratios above 30 percent of projected after-tax net income available to common shareholders in either the BHC baseline or supervisory baseline will receive particularly close scrutiny.

### Basel III Transition Plans

As part of CCAR, the Federal Reserve will continue to evaluate whether the proposed capital actions are appropriate in light of the BHC's plans to meet the proposed Basel III requirements. As part of its capital plan submission, a BHC should provide a transition plan that includes pro forma estimates under baseline conditions of the BHC's regulatory capital ratios under the proposed Basel III capital framework as it would be implemented in the United States.<sup>38</sup> As stated in the September 2010 Group of Governors and Heads of Supervision agreements, BHCs that meet the minimum ratio requirement during the Basel III transition period but remain below the 7 percent tier 1 common equity target (minimum plus conservation buffer) will be expected to maintain prudent earnings retention policies with a view

to meeting the conservation buffer under the time-frame described in the Basel III NPR.<sup>39</sup>

In November 2011, the BCBS published its methodology for assessing an additional loss absorbency requirement for global systemically important banks (SIFI surcharge) that effectively extends the capital conservation buffer.<sup>40</sup> Each BHC's Basel III transition plan should incorporate management's best estimate of the likely SIFI surcharge that would be assessed under this methodology (and any updates published since that time) and a description of how this estimate was derived. The Federal Reserve expects that BHCs will demonstrate with great assurance that, assuming the framework is adopted in the form agreed by the Basel Committee inclusive of a SIFI surcharge, they can achieve the required ratios readily and without difficulty over the transition period, inclusive of any planned capital actions.

A BHC should, through its capital plan, demonstrate an ability to maintain no less than steady progress along a path between its existing Basel III estimated capital ratios and the fully phased in Basel III requirement in 2019. The Federal Reserve will closely scrutinize plans that fall short of this supervisory expectation.

Some BHCs may exceed the transition targets over the near term, but not yet meet the fully-phased-in targets. Those BHCs are expected to submit plans reflecting steady accretion of capital at a sufficient pace to demonstrate continual progress toward full compliance with the proposed Basel III framework as proposed to be implemented in the United States, avoiding the need to attempt to achieve back-loaded increases in capital ratios in an uncertain future environment.

The Federal Reserve expects that any BHC performance projections that suggest that ratios would fall below the transitional Basel III targets at any point over the Basel III projection period would be accompanied by proposed actions that reflect affirmative steps to improve the BHC's capital ratios, including actions such as external capital raises, to provide great assurance that the BHC would continue to meet the Basel III transition targets.

<sup>37</sup> See sections 225.8(d)(4) and (f) of the capital plan rule. 12 CFR 225.8(d)(4) and (f).

<sup>38</sup> See *supra* notes 7–10.

<sup>39</sup> See 77 *Federal Register* 52792, 52864 (August 30, 2012), proposed section \_\_.300(b) of the Basel III NPR.

<sup>40</sup> See *supra* note 10.



## Qualitative Assessments

Qualitative assessments are also a critical component of the CCAR review. Even if the supervisory stress test for a given BHC results in a post-stress tier 1 common capital ratio exceeding 5 percent and other regulatory capital ratios above the minimums, the Federal Reserve could nonetheless object to that BHC's capital plan for other reasons. These reasons include the following:

- There are outstanding material unresolved supervisory issues.
- Assumptions and analyses underlying the BHC's capital plan are inadequate.

- The BHC's capital adequacy process, including the risk measurement and management practices supporting this process, are not sufficiently robust.
- The CCAR assessment results in a determination that a BHC's CAP or proposed capital distributions would otherwise constitute an unsafe or unsound practice, or would violate any law, regulation, Board order, directive, or any condition imposed by, or written agreement with, the Board.<sup>41</sup>

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<sup>41</sup> See section 225.8(e)(2)(ii) of the capital plan rule. 12 CFR 225.8(e)(2)(ii).



# Federal Reserve Responses to Planned Capital Actions

After performing appropriate analysis, the Federal Reserve will, by March 31, either object or provide a notice of non-objection to the submitted capital plan based on assessments of the comprehensiveness and quality of the plan, pro forma, post-stress capital ratios under the scenarios, and Basel III transition plan. The Federal Reserve could object in whole or in part to the proposed capital actions in the plans. The supervisory assessment will be conducted across the entire nine-quarter planning horizon; however, the object or non-object decision applies specifically to capital actions during the four quarters beginning with the second quarter of the following calendar year. For CCAR 2013, this will apply to the 2Q13 through 1Q14 capital actions.

Submissions that are late, incomplete, or otherwise unclear could result in an objection to the plan and a mandatory resubmission of a new plan, which may not be reviewed until the following quarter. Upon the Federal Reserve's objection to a capital plan, the BHC may not make any capital distribution other than those capital distributions with respect to which the Federal Reserve has indicated in writing its non-objection.<sup>42</sup>

Based on a review of a BHC's capital plan, supporting information, and data submissions, the Federal Reserve may require additional supporting information or analysis from a BHC, or require it to revise and resubmit its plan. Any of these may also result in the delay of evaluation of capital actions until a subsequent calendar quarter.

It is important to note that the capital adequacy process described in the capital plan rule is equivalent to an internal capital adequacy assessment process (ICAAP) under the Federal Reserve's advanced approaches capital guidelines.<sup>43</sup> Accordingly, the seven principles articulated in the [appendix](#) to these

instructions are consistent with the U.S. federal banking agencies' supervisory guidance relating to the ICAAP under the advanced approaches guidelines. If the Federal Reserve identifies substantial weaknesses in a BHC's capital adequacy process, that finding on its own could justify an objection to a BHC's capital plan. However, a non-objection to a BHC's capital plan does not necessarily mean that a BHC is considered to have a fully satisfactory capital adequacy process.

## Limited Adjustments to Planned Capital Actions

Upon completion of the quantitative and qualitative assessments of BHCs' capital plans, but prior to the disclosure of the final CCAR results, each BHC will be provided the results of the post-stress capital analysis for its firm and given an opportunity to make a one-time adjustment to planned capital distributions. The only adjustment that will be considered is a reduction from the initially planned capital distributions. The final decision to object or not object will be informed by the adjusted capital distribution plans with consideration given to the qualitative assessment in the context of the quantitative analysis.

## Disclosure of Supervisory Stress Test Results

At the end of the CCAR process, the Federal Reserve intends to publish two sets of results based on the Federal Reserve's supervisory stress tests under the supervisory severely adverse scenario. The Federal Reserve will provide the detailed results of supervisory stress tests for each BHC, including stressed losses and revenues, and the post-stress capital ratios based on the capital action assumptions required under the DFA stress testing rule, along with an overview of methodologies used for supervisory stress tests.

<sup>42</sup> See section 225.8(e)(2)(iv) of the capital plan rule. 12 CFR 225.8(e)(2)(iv).

<sup>43</sup> 73 *Federal Register* 44620 (July 31, 2008).

The Federal Reserve will also publish the BHC-specific post-stress pro forma regulatory capital ratios (leverage, tier 1 risk-based, and total risk-based capital ratios) and the tier 1 common ratio estimated using the planned capital actions in the BHCs' capital plans. The disclosed information will include minimum values of these ratios over the planning horizon, using the originally submitted planned capital actions under the baseline scenario and any adjusted capital distributions in the final capital plans, where applicable. (See [appendix 2](#) for the format that will be used to publish these numbers.)

Both sets of results, with the overview of methodologies and other information related to supervisory stress tests and CCAR, will be published by March 31, 2013.

## Resubmissions

If a BHC receives an objection to its capital plan it must resubmit within 30 days unless that period is extended by the Federal Reserve. The Federal Reserve at all times retains the ability to ultimately object to capital distributions in future quarters if a BHC exhibits a material decline in performance or a deteriorating outlook materially increases BHC-specific risks.

As detailed in the capital plan rule, a BHC must update and resubmit its capital plan if it determines there has been or will be a material change in the BHC's risk profile (including a material change in its business strategy or any material risk exposures),

financial condition, or corporate structure since the BHC adopted the capital plan. Further, the Federal Reserve may direct a BHC to revise and resubmit its capital plan for a number of reasons, including if a stress scenario developed by a BHC is not appropriate to its business model and portfolios, or changes in financial markets or the macroeconomic outlook that could have a material impact on a BHC's risk profile and financial condition requires the use of updated scenarios.

The capital plan rule provides that a BHC must request prior approval of a capital distribution if the "dollar amount of the capital distribution will exceed the amount described in the capital plan for which a non-objection was issued" unless an exception (i.e., less than 1 percent of tier 1 capital) is met.<sup>44</sup> In particular, a BHC should notify the Federal Reserve as early as possible before issuing any capital instrument that counts as regulatory capital and that was not included in its capital plan. Any capital distribution associated with the issuance that was not identified in the capital plan is subject to the requirements of section 225.8(f) of the capital plan rule (12 CFR 225.8(f)). The Federal Reserve will examine performance relative to the initial projections and the rationale for the request. Any such request for prior approval should incorporate a fully updated capital plan, including relevant FR Y-14 schedules reflecting updated baseline and supervisory stress scenarios provided by the Federal Reserve, unless otherwise directed by the Federal Reserve.

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<sup>44</sup> See section 225.8(f) of the capital plan rule. 12 CFR 225.8(f).

# Appendix 1: Supervisory Expectations for a Capital Adequacy Process

A BHC's capital adequacy process (CAP) should adhere to the following principles:

**Principle 1:** The BHC has a sound risk measurement and management infrastructure that supports the identification, measurement, assessment, and control of all material risks arising from its exposures and business activities.

- A satisfactory CAP requires (1) a comprehensive risk identification process, and (2) complete and accurate measurement and assessment of all material risks.
- A BHC should measure or assess the full spectrum of risks that face the BHC, using both quantitative and qualitative methods, where applicable.
- The BHC should have data capture and retention systems that allow for the input, use, and storage of information required for sound risk identification and measurement and to produce reliable inputs for assessments of capital adequacy.
- Quantitative processes for measuring risks should meet supervisory expectations for model effectiveness and be supported by robust model development, documentation, validation, and overall model governance practices. Both qualitative and quantitative processes for assessing risk should be transparent, repeatable, and reviewable by an independent party.
- Any identified weaknesses in risk measures used as inputs to the capital adequacy process should be documented and reported to relevant parties, with an assessment of the potential impact of risk-measurement weaknesses on the reliability of the CAP.

**Principle 2:** The BHC has effective processes for translating risk measures into estimates of potential losses over a range of stressful scenarios and environments and for aggregating those estimated losses across the BHC.

- A CAP should include methodologies that generate estimates of potential losses for all material risk exposures, one of which should be an enterprise-wide stress test using scenario analysis. Methodologies should be complementary, not suffer from common limitations, and minimize reliance on common assumptions.
- Using the loss estimation methodologies for its various risk exposures, a BHC should develop consistent and repeatable processes to aggregate its loss estimates on an enterprise-wide basis.
- A BHC should demonstrate that its loss estimation tools are developed using sound modeling approaches, appropriate for the manner in which they are being employed, and that the most relevant limitations are clearly identified, well documented, and appropriately communicated.
- A BHC should recognize that its loss projections are estimates and should have a good understanding of the uncertainty around those estimates, including the potential margin of error and the sensitivity of the estimates to changes in inputs and key assumptions.

**Principle 3:** The BHC has a clear definition of available capital resources and an effective process for estimating available capital resources (including any projected revenues) over the same range of stressful scenarios and environments used for estimating losses.

- Management and the board of directors should understand the loss-absorption capabilities of the components of the BHC's capital base, and maintain projection methodologies for each of the capital components included in relevant capital adequacy metrics.
- In estimating available capital resources, a BHC will need to consider not only its current positions and mix of capital instruments, but also how its capital resources may evolve over time under varying circumstances and stress scenarios.

- As part of a comprehensive enterprise-wide stress testing program, projections of pre-provision net revenue (PPNR) should be consistent with balance sheet and other exposure assumptions used for related loss estimation. Projections should estimate all key elements of PPNR, including net interest income, non-interest income, and non-interest expense at a level of granularity consistent with material revenue and expense components.
- A BHC should demonstrate that its capital resource estimation tools are developed using sound modeling approaches, appropriate for the manner in which they are being employed, and that the most relevant limitations are clearly identified, well documented, and appropriately communicated.
- A BHC should recognize that its projections of capital resources are estimates and should have a good understanding of the uncertainty around those estimates, including the potential margin of error and the sensitivity of the estimates to changes in inputs and key assumptions.

**Principle 4:** The BHC has processes for bringing together estimates of losses and capital resources to assess the combined impact on capital adequacy in relation to the BHC's stated goals for the level and composition of capital.

- A BHC should have a comprehensive and consistently executed process for combining loss, resource, and balance sheet estimates to assess the baseline and post-stress impact of those estimates on capital measures.
- A BHC should calculate and use several capital measures that represent both leverage and risk at specified time horizons under both baseline and stressful conditions, consistent with its capital policy framework. Measures should include quarterly estimates for the impact on tier 1 common, total tier 1, total capital, and tier 1 leverage ratios, as well as other capital and risk measures useful in assessing overall capital adequacy.
- The processes for bringing together estimates of losses and capital resources should ensure that appropriately stressful conditions over the BHC's planning horizon have been incorporated to properly address the institution's unique vulnerabilities.
- The processes should provide for the presentation of any information that may have material bearing on the BHC's capital adequacy assessment, includ-

ing all relevant risks and strategic factors, as well as key uncertainties and process limitations.

**Principle 5:** The BHC has a comprehensive capital policy and robust capital planning practices for establishing capital goals, determining appropriate capital levels and composition of capital, making decisions about capital actions, and maintaining capital contingency plans.

#### *Capital Policy*

- A capital policy is defined as a BHC's written assessment of the principles and guidelines used for capital planning, capital issuance, and usage and distributions, including internal capital goals; the quantitative or qualitative guidelines for dividend and stock repurchases; the strategies for addressing potential capital shortfalls; and the internal governance procedures around capital policy principles and guidelines.
- A BHC should establish capital goals aligned with its risk appetite and risk profile as well as expectations of stakeholders, providing specific targets for the level and composition of capital. The BHC should ensure that maintaining its internal capital goals will allow it to continue its operations under stressful conditions.
- The capital policy should describe the decision making processes regarding capital goals, the level and composition of capital, capital actions, and capital contingency plans, including an explanation of the roles and responsibilities of key decision makers and information and analysis used to make decisions.
- In its capital policy the BHC should describe its methods for considering stressful conditions that appropriately reflect the BHC's unique vulnerabilities, including the choice of stress scenarios. The policy should discuss how the BHC will address the potential impact of changes or uncertainties in the economic, financial, regulatory, or accounting environment.
- The BHC should outline in its policy specific capital contingency actions it would consider to remedy any current or prospective deficiencies in its capital position, including any triggers and escalation procedures. The policy should also include a detailed explanation of the circumstances in which it will reduce or suspend a dividend or repurchase program, or will not execute a previously planned capital action.



- A BHC should establish a minimum frequency with which its capital plan is reevaluated (at least annually). In addition, a BHC should review its capital policy at least annually to ensure it remains relevant and current.

#### *Capital Planning Practices*

- At regular intervals, a BHC should compare the estimates of baseline and post-stress capital measures (see Principle 4) to the capital goals established in the capital policy for purposes of informing capital decisions.
- For capital decisions, consideration should be given to any information that may have material bearing on the BHC's capital adequacy assessment, including all relevant risks and strategic factors, key uncertainties, and limitations of the CAP.
- Assessments of capital adequacy and decisions about capital should be supported by high-quality data and information, informed by current and relevant analysis, and subject to challenge by senior management and the board of directors.
- Periodically, the BHC should conduct a thorough assessment of its capital contingency strategies, including their feasibility under stress, impact, timing, and potential stakeholder reactions.
- The BHC should regularly review and update its consideration of stressful conditions, including scenario assumptions and variables, to reflect current market/economic conditions, changing portfolio risk characteristics, regulatory/accounting changes, and other relevant developments.
- A BHC should administer its capital planning activities and capital decision processes in conformance with its policy framework, documenting and justifying any divergence from policy.

**Principle 6:** The BHC has robust internal controls governing capital adequacy process components, including policies and procedures; change control; model validation and independent review; comprehensive documentation; and review by internal audit.

- The internal control framework should encompass the entire CAP, including the risk measurement and management systems used to produce input data, the models and other techniques used to estimate loss and resource estimates, the process for making capital adequacy decisions, and the aggregation and reporting framework used to produce management and board reporting. The set of control functions in place should provide confirmation

that all aspects of the CAP are functioning as intended.

- Policies and procedures should ensure a consistent and repeatable process and provide transparency to third parties for their understanding of a BHC's CAP processes and practices. Policies and procedures should be comprehensive, relevant to their use in the CAP, periodically updated and approved, and cover the entire CAP and all of its components.
- Specific to the CAP, a BHC should have internal controls that ensure the integrity of reported results and that all material changes to the CAP and its components are appropriately documented, reviewed, and approved. A BHC should have controls to ensure that management information systems are robust enough to support stress tests with sufficient flexibility to run ad hoc analysis as needed.
- Expectations for validation and independent review for components of the CAP are consistent with existing supervisory guidance on model risk management (SR letter 11-7). Models should be independently validated or otherwise reviewed in line with model risk management and model governance expectations.
- A BHC should have clear and comprehensive documentation for all aspects of its CAP, including its risk measurement and management infrastructure, loss- and resource-estimation methodologies, the process for making capital decisions, and efficacy of control and governance functions.
- A BHC's internal audit should play a strong role in evaluating the CAP and its components. A full review of the CAP should be done by audit periodically to ensure that as a whole the CAP is functioning as expected and in accordance with the BHC's policies and procedures. Internal audit should review the manner in which CAP deficiencies are identified, tracked, and remediated.

**Principle 7:** The BHC has effective board and senior management oversight of the CAP, including periodic review of the BHC's risk infrastructure and loss and resource estimation methodologies; evaluation of capital goals; assessment of the appropriateness of stressful scenarios considered; regular review of any limitations and uncertainties in all aspects of the CAP; and approval of capital decisions.

- The board of directors should make informed decisions on capital adequacy for its BHC by receiving

sufficient information detailing the risks the BHC faces, its exposures and activities, and the impact that loss and resource estimates may have on its capital position.

- Information provided to the board about capital adequacy should be framed against the capital goals established by the BHC and by obligations to external stakeholders, and consider capital adequacy for the BHC with respect to the current circumstances as well as on a pro forma, post-stress basis.
- The information the board of directors reviews should include a representation of key limitations, assumptions, and uncertainties within the CAP, enabling the board to have the perspective to effectively understand and challenge reported results. The board should take action when weaknesses in the CAP are identified, giving full consideration to the impact of those weaknesses in their capital decisions.
- Senior management should ensure that all weaknesses in the CAP are identified, as well as key assumptions, limitations, and uncertainties, and evaluate them for materiality (both individually and collectively). Senior management should also have remediation plans for any weaknesses affecting CAP reliability or results.
- Using appropriate information, senior management should make informed recommendations to the board of directors about the BHC's capital, including capital goals and distribution decisions. Senior management should include supporting information to highlight key assumptions, limitations, and uncertainties in the CAP that may affect capital decisions.
- A BHC should appropriately document the key decisions about capital adequacy—including capital actions—made by the board of directors and senior management, and describe the information used to make those decisions.



## Appendix 2: Disclosure Tables

**Table A.1. Dodd-Frank Act Stress Testing Results**  
**Minimum Stressed Tier 1 Common Ratios, Q4 2012 to Q4 2014**  
**Federal Reserve Estimates in the Supervisory Severely Adverse Scenario**

The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. The minimum stressed ratios (%) are the lowest quarterly ratios from Q4 2012 to Q4 2014 in the supervisory severely adverse scenario.

Bank Holding Company	Stressed Ratios with DFA Stress Testing Capital Action Assumptions
Ally Financial Inc.	
American Express Company	
Bank of America Corporation	
The Bank of New York Mellon Corporation	
BB&T Corporation	
Capital One Financial Corporation	
Citigroup Inc.	
Fifth Third Bancorp	
The Goldman Sachs Group, Inc.	
JPMorgan Chase & Co.	
Keycorp	
MetLife, Inc.	
Morgan Stanley	
The PNC Financial Services Group, Inc.	
Regions Financial Corporation	
State Street Corporation	
SunTrust Banks, Inc.	
U.S. Bancorp	
Wells Fargo & Co.	
Source: Federal Reserve estimates in the supervisory severely adverse scenario.	

**Table A.2. Dodd-Frank Stress Testing Results**  
**Projected Stressed Capital Ratios, Losses, Revenues, Net Income before Taxes,**  
**and Loan Losses by Type of Loan**  
**Federal Reserve Estimates in the Supervisory Severely Adverse Scenario**  
**BHC XXX, Inc.**

The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2012 to Q4 2014.

**Projected Capital Ratios through Q4 2014 under the Supervisory Severely Adverse Scenario**

	Actual	Stressed Capital Ratios	
	Q3 2012	Q4 2014	Minimum
Tier 1 Common Ratio (%)			
Tier 1 Capital Ratio (%)			
Total Risk-based Capital Ratio (%)			
Tier 1 Leverage Ratio (%)			

**Projected Losses, Revenue, and Net Income Before Taxes**  
**through Q4 2014 under the Supervisory Severely Adverse**  
**Scenario**

	Billions of Dollars	Percent of Average Assets
Pre-provision Net Revenue <sup>1</sup>		
Other Revenue <sup>2</sup>		
Less		
Provisions		
Realized Gains/Losses on Securities (AFS/HTM)		
Trading and Counterparty Losses <sup>3</sup>		
Other Losses/Gains <sup>4</sup>		
Equals		
Net Income Before Taxes		

<sup>1</sup> Pre-provision net revenue includes losses from operational risk events, mortgage put-back expenses, and OREO costs.

<sup>2</sup> Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

<sup>3</sup> Trading and counterparty includes mark-to-market losses, changes in credit valuation adjustments (CVA) and incremental default losses.

<sup>4</sup> Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option, and goodwill impairment losses.

**Projected Loan Losses by Type of Loans for Q4 2012**  
**through Q4 2014 under the Supervisory Severely Adverse**  
**Scenario**

	Billions of Dollars	Portfolio Loss Rates (%)
Loan Losses <sup>1</sup>		
First Lien Mortgages, Domestic		
Junior Liens and HELOCs, Domestic		
Commercial and Industrial		
Commercial Real Estate		
Credit Cards		
Other Consumer		
Other Loans		

<sup>1</sup> Commercial and industrial loans include small and medium enterprise loans and corporate cards. Other loans include international real estate loans. Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option.

**Table A.3. Comprehensive Capital Analysis and Review  
Minimum Stressed Tier 1 Common Ratios, Q4 2012 to Q4 2014  
Federal Reserve Estimates in the Supervisory Severely Adverse Scenario**

The capital ratios are calculated using original and adjusted planned capital actions from 2013 annual capital plans. The minimum stressed ratios (%) are the lowest quarterly ratios from Q4 2012 to Q4 2014 in the supervisory severely adverse scenario. The left column shows the minimum ratios assuming the capital actions originally submitted by each BHC in its January 2013 annual capital plan. The right column shows the minimum ratios incorporating any adjustments to capital distributions made by the BHCs after reviewing the Federal Reserve's stress test projections.

Bank Holding Company	Stressed Ratios with Original Planned Capital Actions	Stressed Ratios with Adjusted Planned Capital Actions
Ally Financial Inc.		
American Express Company		
Bank of America Corporation		
The Bank of New York Mellon Corporation		
BB&T Corporation		
Capital One Financial Corporation		
Citigroup Inc.		
Fifth Third Bancorp		
The Goldman Sachs Group, Inc.		
JPMorgan Chase & Co.		
Keycorp		
MetLife, Inc.		
Morgan Stanley		
The PNC Financial Services Group, Inc.		
Regions Financial Corporation		
State Street Corporation		
SunTrust Banks, Inc.		
U.S. Bancorp		
Wells Fargo & Co.		
Source: Federal Reserve estimates in the supervisory severely adverse scenario.		

**Table A.4. Comprehensive Capital Analysis and Review  
Minimum Tier 1 Common Ratios, Q4 2012 to Q4 2014  
Federal Reserve Estimates in the Supervisory Severely Adverse Scenario  
BHC XXX, Inc.**

The capital ratios are calculated using original and adjusted planned capital actions from 2013 annual capital plans. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of capital ratios. The center column shows the minimum ratio assuming the capital actions originally submitted by the BHC in its January 2013 annual capital plan. The right column shows minimum ratios incorporating any adjustments to capital distributions made by the BHC after reviewing the Federal Reserve's stress test projections. The two minimum capital ratios presented below are for the period Q4 2012 to Q4 2014 and do not necessarily occur in the same quarter.

Projected Capital Ratios through Q4 2014 under the Supervisory Severely Adverse Scenario			
	Actual	Stressed Ratios with Original Planned Capital Actions	Stressed Ratios with Adjusted Planned Capital Actions
	Q3 2012	Minimum	Minimum
Tier 1 Common Ratio (%)			
Tier 1 Capital Ratio (%)			
Total Risk-based Capital Ratio (%)			
Tier 1 Leverage Ratio (%)			

